

**BIOLOGICAL LETTER REPORT
FOR**

ANTONIO MINOR SUBDIVISION

TPM 21030

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Summary

The proposed project is a minor subdivision and residential development of 1.40 gross acres, APN 397-060-81, into three parcels. The site contains both developed and undeveloped land. The project is located on the western side of Los Coches Road in the Community of Lakeside. The three proposed parcels have gross sizes ranging from 0.33 to 0.67 acres. Access will be provided by Los Coches Road to each parcel. The project will be supplied water by connecting into the public water system. Offsite improvements will occur for grading and paving the driveways connecting with Los Coches Road.

This report provides information regarding existing conditions, and performs an impact analysis based on the current site design. This report also identifies mitigation measures in conformance with the Biological Mitigation Ordinance (BMO), reducing impacts to below a level of significance. The proposed project is located within the Metro-Lakeside-Jamul portion of the Multiple Species Conservation Program (MSCP). The project site is not located within a Pre-Approved Mitigation Area (PAMA) and does not qualify as a Biological Resource Core Area (BRCA).

A general biological and sensitive plant survey were performed onsite. The biological resources onsite include four habitat types as defined by the County Mapping Guidelines: coastal sage scrub, non-native grassland, disturbed and developed. Biological resources that are afforded some level of protection under the BMO would include the coastal sage scrub and non-native grassland habitats.

No sensitive plant or animal species were observed onsite. All sensitive plant and animal species known from the area have a low potential to occur onsite since they would have been observable onsite and/or due to the disturbed site conditions, isolation from other undeveloped lands, and small size.

Impacts to approximately 0.10 acres of coastal sage scrub, 0.24 acres of non-native grassland, 0.02 acres of disturbed, and 1.03 acres of developed habitat will occur onsite as a result of the proposed project. These impacts are considered locally important and require mitigation in accordance with the BMO. Mitigation for impacts 0.10 of Tier II habitat or greater within a BRCA. Impacts to 0.24 acres of non-native grassland will be mitigated through the offsite acquisition of 0.12 acres of Tier III habitat or greater within a BRCA. No mitigation is required for impacts to disturbed and developed habitats since they are Tier IV as determined by the BMO. Implementation of these mitigation measures will reduce impacts to below a level of significance.

Introduction, Project Description, Location, and Setting

The proposed project is a minor subdivision and residential development of 1.40 gross acres, APN 397-060-81, into three parcels. The project area is located in the southeastern portion of San Diego County within the foothills and interior valleys of the region (Figure 1). The project is located on Los Coches Road in the Community of Lakeside. The property is undeveloped and bordered by Los Coches Creek to the south (Figure 2).

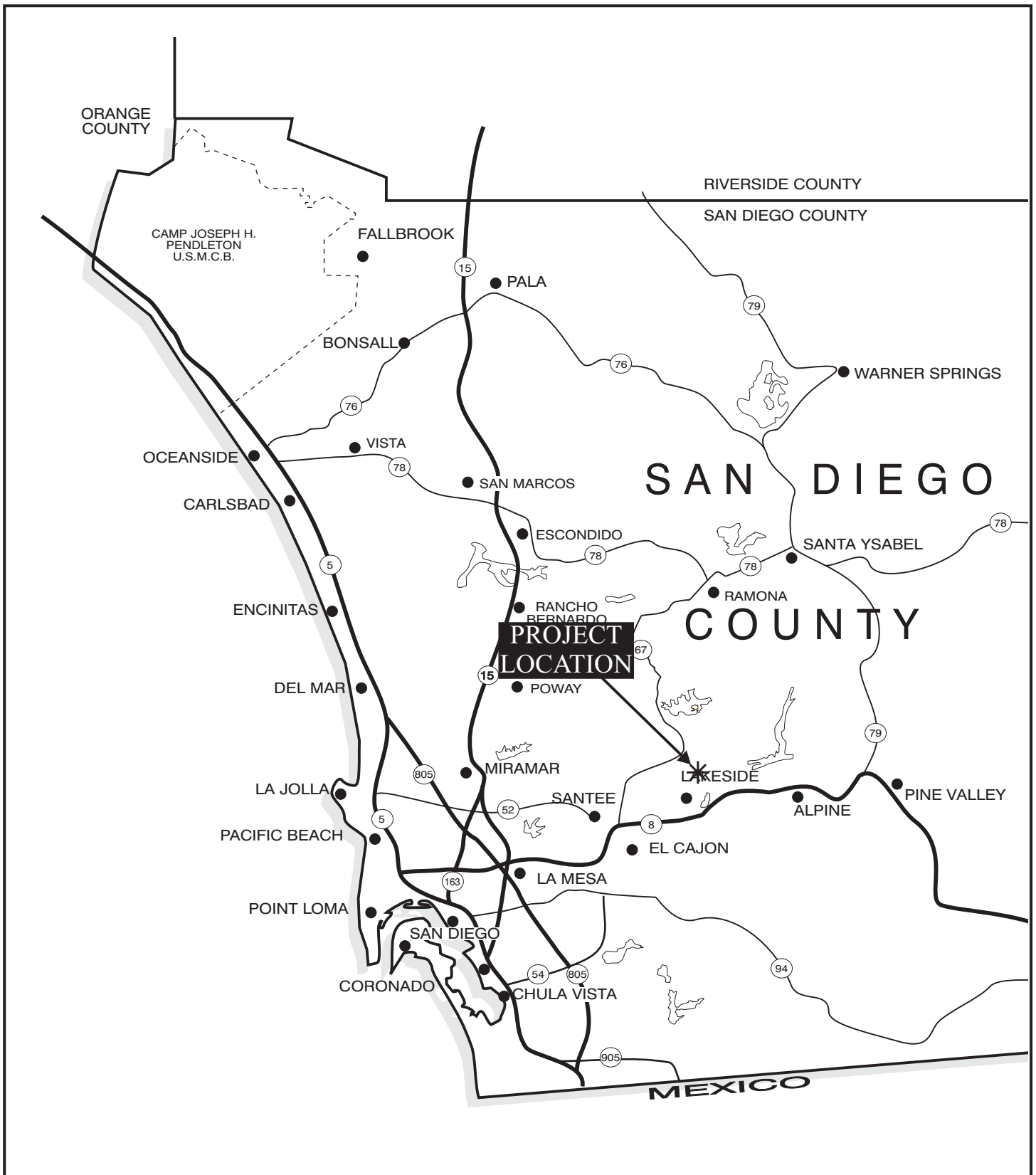


Figure 1
Regional Location Map



The three proposed parcels have gross sizes ranging from 0.33 to 0.67 acres. Access will be provided directly off of Los Coches Road. The project will be supplied water by connecting into the public water system. Offsite improvements will occur for grading and paving the proposed driveways connecting with Los Coches Road.

The project site is a small area of both developed and undeveloped land located within an area of residential development (Figure 2). The site is not located within a PAMA and does not qualify as a BRCA as defined by the BMO. It is located within the Metro-Lakeside-Jamul portion of the MSCP.

Topography and Soils

The project area is shown on the El Cajon USGS 7.5' Quadrangle in Township 16 South, Range 1 East (Figure 3). Elevations range from 453 feet to 465 above mean sea level (MSL).

Two soil types occur onsite: Grangeville fine sandy loam (GoA), 0 to 2 percent slopes; and Tujunga sand (TuB), 0 to 5 percent slopes (Bowman 1973). The Grangeville series consists of somewhat poorly drained, very deep fine sandy loams derived from granitic alluvium. These soils are on alluvial fans and alluvial plains and have slopes of 0 to 2 percent. The Tujunga series consists of very deep, excessively drained sands derived from granitic alluvium. These soils are on alluvial fans and flood plains and have slopes of 0 to 5 percent. The elevation ranges from sea level to 1,500 feet (Bowman 1973).

Site Survey

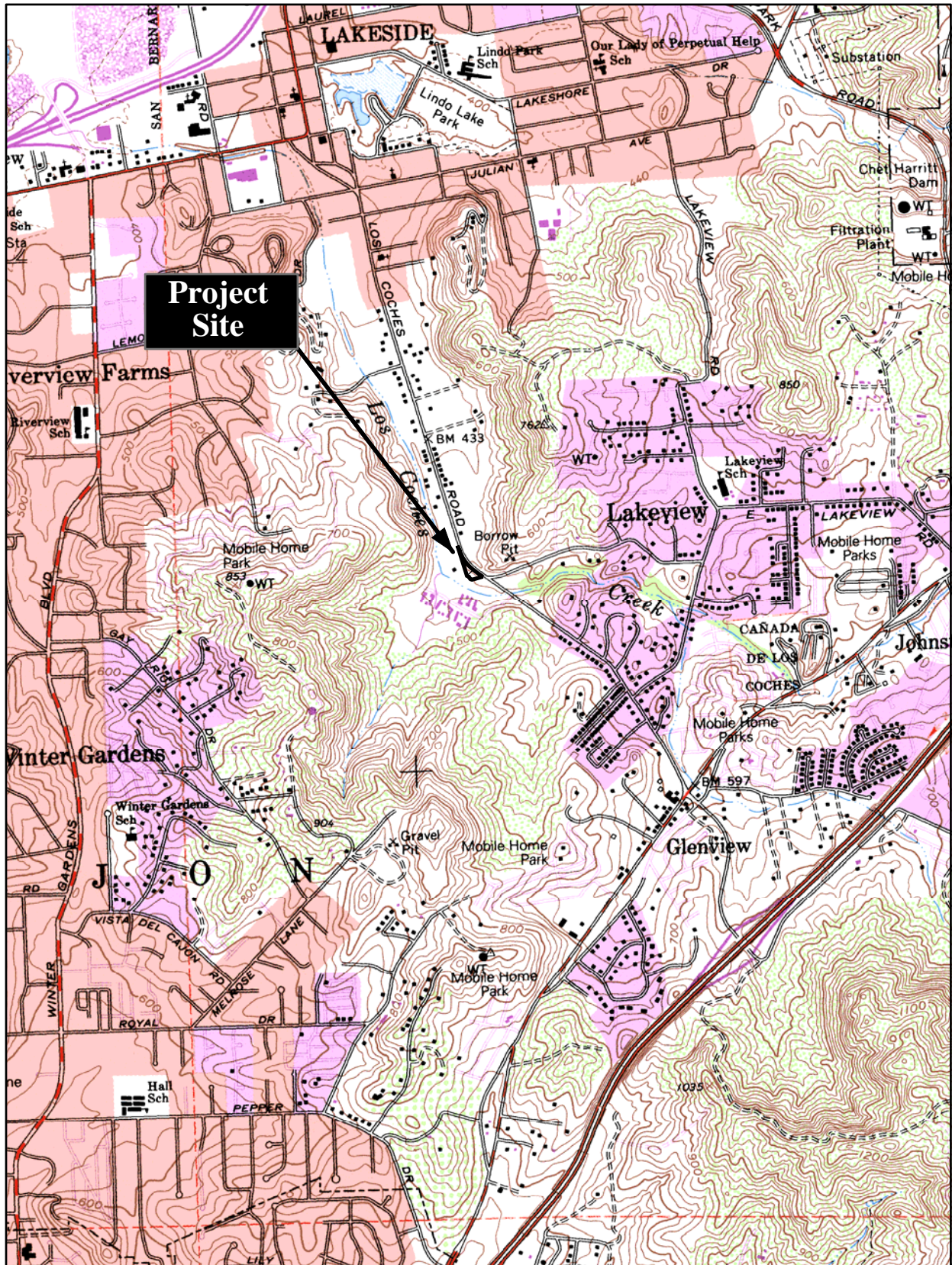
The site was surveyed on foot by Sara Thorne from 8:00 to 8:35 AM on March 1, 2007. Site conditions consisted of clear skies, 0 to 1 mile per hour winds and a temperature of 53 to 56 degrees Fahrenheit. Mapping was performed following the Guidelines for Determining Significance; and Survey, Report Format, Content and Mapping Requirements (County 2006). Wildlife species were identified directly by sight or by vocalizations, and indirectly by scat, tracks, or burrows. Field notes were maintained throughout the surveys and species of interest were mapped. The primary focus of the survey was to document and map the size, location, and general quality of all habitat types and the presence or potential presence of any sensitive resources (plant or wildlife) onsite. Biological resources were mapped on Figure 4.

Nomenclature for this report conforms to Hickman (1993), for plants, Holland (1986) and Oberbauer (1996) for plant communities and habitat types, American Ornithological Union (AOU 1998 and 2000) for birds, Jennings (1983) and Stebbins (2003) for reptiles and amphibians, Jones (1992) for mammals, and Powell (1979) for insects.



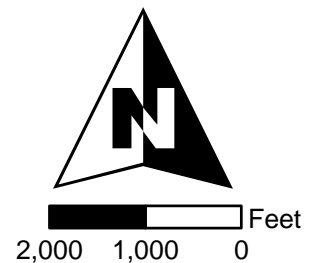
Source: AirPhoto USA 1/2006

<p>RC Biological Consulting, Inc.</p>	<p>Aerial Antonio Project - TPM 21030</p>	<p>Figure 2</p>
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Source: USGS 7.5' El Cajon Quadrangle

Figure 3
Antonio Property
TPM 21030



Biological Resources Present

The biological resources onsite include four habitat types: coastal sage scrub, non-native grassland, disturbed and developed. Los Coches Creek occurs offsite to the south. A total of five wildlife species were identified onsite. These included four bird species, and one mammal species.

Habitats and Vegetation Communities

Following is a summary of the existing habitats and vegetation communities on the site. This section includes information about the habitat types, the vegetation that was identified in each habitat in acres, the dominant species present and the habitat quality. Species abundance, composition and diversity are discussed in terms of vegetative structure and wildlife, as well as the habitat sensitivity level and regional and local importance of conserving each habitat type.

Habitat descriptions are based on the County of San Diego's Biological Mapping Requirements (County 2006) and Terrestrial Vegetation Communities in San Diego County based in Holland's Descriptions (Oberbauer 1996), however, it has been shown that habitats on the project sites in San Diego County are often not pristine and rarely fit into one description. Therefore the best-fit definition based on the County's current descriptions and dominant plant species has been applied.

Habitats

The site currently supports four habitat types, coastal sage scrub, non-native grassland, disturbed, and developed habitat (Figure 4). A complete list of plant species observed onsite is included in Appendix A.

Coastal Sage Scrub (Habitat Code: 32510)

Approximately 0.10 acres of coastal sage scrub occurs onsite along a strip of rocks along the southeastern region of the site. It is likely that this area could not be maintained due to the presence of rocks and has allowed coastal sage brush species to remain. Species observed in this habitat include California buckwheat (*Eriogonum fasciculatum*), broom baccharis (*Baccharis sarothroides*), coastal sagebrush (*Artemisia californica*), and white sage (*Salvia apiana*). The regional value of the coastal sage scrub habitat onsite is low due to the low potential to support sensitive species. This habitat onsite is small in size, is surrounded by a high level of disturbance, and is isolation from undeveloped lands.

Non-Native Grassland (Habitat Code: 42200)

Approximately 0.24 acres of non-native grassland occurs within the southern portion of the site. This area appears to have been cleared regularly since the dominant plant species is black mustard (*Brassica nigra*), a weedy annual. Other species observed within this

habitat include horehound (*Marrubium vulgare*), thistle (*Centaurea* sp.), and foxtail chess (*Bromus madritensis* ssp. *rubens*). The regional value of the non-native grassland is low. The non-native grassland onsite does not support sensitive species.

Disturbed Habitat (Habitat Code: 11300)

Approximately 0.02 acres of disturbed habitat occur onsite in association with a small area in the southwest corner of the project site. This area consisted of bare ground with scattered weedy annuals occupying less than 5 percent cover. This area falls within the vacated road easement for Chestnut Street. The regional value of disturbed habitat is low. The disturbed habitat onsite has a low potential to sensitive species.

Developed Habitat (Habitat Code: 12000)

Approximately 1.03 acres of developed habitat occurs onsite in association with brush management onsite for the adjacent residences to the west and a section of Los Coches Road easement. The regional value of developed habitat is low. The developed habitat onsite does not support sensitive species.

Wildlife Observed

A total of five wildlife species were identified onsite. These include four bird species, and one mammal species. Birds observed included scrub jay (*Aphelocoma californica*), mourning dove (*Zenaida macroura*), Anna's humming bird (*Calypte anna*), and bushtit (*Psaltiriparus minimus*). The one mammal observed includes desert cottontail rabbit (*Sylvilagus audubonii*). A complete list of wildlife species observed onsite is included as Appendix B.

Special Status Species

Following is a summary of all sensitive species with potential to occur on the site or on land immediately adjacent to the site. Sensitive or special interest plant and wildlife species and habitats are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive species are so called because of their limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, degradation due to development or invasion by non-native species, or a combination of all of these factors.

The following were used in the determination of sensitive biological resources: U.S. Fish and Wildlife Service (USFWS) (USFWS 2001); California Department of Fish and Game (CDFG) (CDFG 1999, 2000 and 2001), County Sensitive Plant and Animal list, and the California Natural Diversity Database (CNDDB).

Sensitive Plants

Sensitive plant species were surveyed for during the general plant and wildlife survey. The project site is highly disturbed and the remaining habitat onsite was assessed for potential to support sensitive plant species. Thirteen sensitive plant species are known from the area. All of these species have a low potential to occur onsite for the following reasons: would have been observable during site survey; lack of appropriate habitat; lack of appropriate soils; high level of site disturbance; and isolated patch of native habitat. If sensitive plant species occur onsite, it is likely they occur in isolated populations that are not a significant component to the species in a regional context. Sensitive plant species known from the region are discussed in Appendix C.

Narrow Endemic Plant Species

Three narrow endemic plant species are known from the area: San Diego thornmint (*Acanthamintha ilicifolia*), San Diego ambrosia (*Ambrosia pumila*), and variegated dudleya (*Dudleya variegata*). Appropriate habitat for these species does not exist onsite and, as a result, have a low potential to occur. Narrow endemic plant species with a potential to occur onsite are discussed in Appendix C.

Sensitive Wildlife

No sensitive wildlife species were observed onsite.

Sensitive Wildlife with the Potential to Occur

Thirty-five sensitive wildlife species are known from the area (Appendix D). All of these species would have a low potential to occur onsite due to the high level of disturbance onsite and the isolation from undeveloped lands created by the surrounding development. If sensitive wildlife species occupy the site, it is likely they occur in isolated populations that are not a significant component to the species in a regional context.

Of the sensitive species known from the area, two are federally listed: the Quino checkerspot butterfly (*Euphydryas editha quino*) and California gnatcatcher (*Poliophtila californica californica*). Both of these species have a low potential to occur onsite and are discussed below.

Quino Checkerspot Butterfly (*Euphydryas editha quino*)

Status: Federally listed as Endangered.

The United States Fish and Wildlife Service (USFWS) officially listed the Quino checkerspot butterfly (*Euphydryas editha quino*) as endangered on January 16, 1997 (USFWS 1997). For this reason the Quino checkerspot is protected under the provisions of the Endangered Species Act (ESA) of 1973, as amended. As such, “take” of this species, either directly or indirectly, is prohibited by law. In order to help land owners in preventing an unknowing “take” of this species, the USFWS has required that land

owners have a protocol survey conducted on their land prior to project implementation in order to determine the presence or absence of this species.

The Quino checkerspot butterfly is one of several subspecies of *Euphydryas editha*. It is a member of the brush-footed butterfly family (Nymphalidae). The Quino checkerspot is associated with a variety of habitats which include clay soil meadows, grassland, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland and semi-desert (Ballmer et al., 2000). Despite association with a wide range of habitat, distribution of this species is restricted to areas which support the larval host plants. The Quino's primary host plant is *Plantago erecta*. Other possible larval host plant species include *Plantago patagonica*, *Antirrhinum coulterianum*, *Castilleja exserta* and/or *Cordylanthus rigidus* (USFWS 2002) as well as *Collinsia* and possibly other Scrophulariaceae (Ballmer et al., 2000). Generally the flight season for the quino checkerspot occurs from late February through April, peaking in March or April.

Based on the Quino checkerspot butterfly survey protocol information (USFWS 2002), the project site would not be recommended for butterfly surveys since is a small in-fill parcel (smaller than an acre completely surrounded by urban development) largely dominated by non-native vegetation. No host plant for this species was observed during the general survey. This species has a low potential to occur onsite.

California Gnatcatcher (*Polioptila californica*)

Status: Federally listed as Threatened, State Species of Concern

The California gnatcatcher (CAGN), a Federally Threatened species and California Species of Concern, is a small gray songbird that is a resident of scrub-dominated communities in southwestern California from the Los Angeles Basin through Baja California, Mexico. California gnatcatcher populations have declined due to extensive loss of Diegan coastal sage scrub habitat to urban and agricultural uses.

The California gnatcatcher usually occupies a territory 2 to 14 acres in size (Atwood 1991). A dominant component of its habitat is coastal sagebrush (*Artemisia californica*) but this is not a dominant plant species in the coastal sage scrub onsite. In addition the potential gnatcatcher habitat onsite totals 0.09 acres and is isolated from other coastal sage scrub by the surrounding development and disturbance (Figure 2). The coastal sage scrub onsite is too small and isolated for this species; therefore, the California gnatcatcher has a low potential to occur onsite.

Jurisdictional Wetlands and Waterways

No jurisdictional wetlands or drainages occur onsite. Los Coches Creek is located approximately 50 to 100 feet to the south of the project site. No impacts are proposed to this creek.

Other Unique Features/Resources

Wildlife Corridors and Linkages

Wildlife corridors exist on both regional and local levels. Within the region of the project site, the most probable wildlife corridor would be associated with the Dehesa to El Capitan Reservoir linkage, approximately 4 miles to the southwest of the project site. The project site is located outside of a PAMA. It is unlikely that the project site is used as a corridor (either regionally or locally) because it is surrounded by development to the north, and west, Los Coches Road to the east, and a disturbed portion of Los Coches Creek to the south (Figure 2). The development of the property will not affect wildlife movement within the area either locally or regionally since the project is surrounded by development.

Significance of Project Impacts and Proposed Mitigation

Following is a summary of impacts to biological resources. Applicable and feasible mitigation measures, as required, are proposed that will reduce impacts to less than significant in conformance with the County of San Diego Guidelines for Determining Significance for Biological Resources (September 2006).

The proposed project is a minor subdivision and residential development of 1.40 gross acres into three parcels. The three proposed parcels have gross sizes ranging from 0.33 to 0.67 acres. The entire project site is proposed to be impacted. Offsite impacts to Los Coches Road as the result of the proposed driveways is not analyzed in this impact analysis since the Road is already developed.

The project is located within the Metro-Lakeside-Jamul portion of the MSCP, outside of a PAMA. Table 1 identifies the potential impacts as a result of the proposed project. The mitigation ratios are based on the premise that the site is not within a BRCA and the mitigation site qualifies as a BRCA.

Table 1				
Habitat and Impact Acreage				
Habitat/Vegetation Community	Existing (acres)	Impacts Onsite (acres)	Mitigation Ratio	Mitigation Required (acres)
Coastal Sage Scrub (Tier II)	0.10	0.10	1:1	0.10
Non-Native Grassland (Tier III)	0.24	0.24	0.5:1	0.12
Disturbed (Tier IV)	0.02	0.02	NA	NA
Developed (Tier IV)	1.03	1.03	NA	NA
Total	1.39	1.39	NA	NA

Significance of Project Impacts

This section addresses potential direct, indirect, and cumulative impacts to biological resources that would result from implementation of the proposed project, and provides analyses of significance for each potential impact.

Direct Impacts are immediate impacts resulting from the permanent removal of habitat.

Indirect Impacts result from changes in land use adjacent to natural habitat and primarily result from adverse “edge effects;” either short-term indirect impacts related to construction or long-term, chronic indirect impacts associated with urban development. During construction of the project, short-term indirect impacts include dust and noise which could temporarily disrupt habitat and species vitality or construction related soil erosion and run-off. Long-term indirect impacts may include intrusions by humans and domestic pets, noise, lighting, invasion by exotic plant and wildlife species, use of toxic chemicals (fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, litter, fire, and hydrological changes (e.g., groundwater level and quality).

Cumulative Impacts refer to incremental individual environmental effects of two or more projects when considered together. These impacts taken individually may be minor, but collectively significant as they occur over a period of time.

Thresholds of Significance

The evaluation of whether or not an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to, or result in, permanent loss of an important resource, such as a population of a rare plant or animal. Impacts may be important locally because they result in an adverse alteration of existing site conditions, but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact is the primary determinant of whether or not that impact can be mitigated to a level below significant. Generally, there are three levels of adverse impacts associated with biological resources: significant, locally important, and not significant. These levels of impacts were applied to the project site and are used below in the discussion of specific potential impacts.

Direct Impacts

Direct impacts to the coastal sage scrub and non-native grassland would be considered locally important and would require mitigation. These impacts are discussed below. Direct impacts to the disturbed and developed habitat onsite and offsite would not be considered significant.

Coastal Sage Scrub (Tier II)

Impacts to approximately 0.10 acres of coastal sage scrub onsite would be considered locally important. These impacts would require mitigation at a 1:1 ratio in accordance with the BMO.

Non-Native Grassland (Tier III)

Impacts to approximately 0.24 acres of non-native grassland onsite would be considered locally important. These impacts would require mitigation at a 0.5:1 ratio in accordance with the BMO.

Disturbed Habitat (Tier IV)

Impacts to the approximately 0.02 acres of disturbed habitat onsite would not be considered significant under the BMO and would not require mitigation.

Developed Habitat (Tier IV)

Impacts to the approximately 1.03 acres of developed habitat onsite would not be considered significant under the BMO and would not require mitigation.

Indirect Impacts

Indirect impacts from the proposed project may include noise and lighting disturbance during construction; however, these impacts would be temporary and would not be considered significant due the surrounding development.

Cumulative Impacts

The project would not contribute to significantly cumulative impacts due the fact that it is mitigating in conformance with the BMO. Other past, present and foreseeable projects within the MSCP will be required to mitigate in conformance with the MSCP also. The County of San Diego is in rough-step conformance with the goals of the MSCP.

Mitigation

Under the California Environmental Quality Act (CEQA), mitigation is required for all significant biological impacts (i.e. impacts within highly constrained areas). The following mitigation measures are recommendations to offset significant impacts. Recommendations are also given to offset locally important biological impacts. Although mitigation measures are not often required for locally important impacts, local jurisdictions often implement these measures to minimize cumulative impacts within the region.

According to Appendix G of the State CEQA guidelines, the proposed project would have a potentially significant impact to onsite biological resources if it would:

- Have a substantial adverse affect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

Resource Protection Ordinance

Under the RPO (discussed above), development of wetlands, wetland buffer areas, and sensitive habitat lands is restricted, as follows:

Within *wetlands*, the RPO restricts uses to aquaculture, scientific research, educational or recreational uses, or wetland restoration, and imposes further limitations which include, in particular, that grading, filling and construction is not permitted.

Within *wetland buffer areas*, the RPO allows uses permitted in wetland areas, plus access paths and other improvements necessary to protect adjacent wetlands.

Biological Mitigation Ordinance

The BMO requires that mitigation be provided, in accordance with ratios which take into account factors such as: (1) What "Tier" the impacted habitat falls into; (2) whether the impacted resources are located within a BRCA and (3) whether the mitigation land would be located onsite or offsite. As discussed in the project summary, the project site does not qualify as a BRCA.

Mitigation Recommendations

Under CEQA, mitigation is required for all significant biological impacts. Mitigation, per resource, is discussed below with corresponding level of significance after mitigation.

Coastal Sage Scrub (Tier II)

Approximately 0.10 acres of this habitat will be impacted as a result of the proposed project. Mitigation for this impact will be at a 1:1 ratio through the offsite conservation of 0.10 acres of Tier II habitat or habitat of a greater value within a BRCA. The implementation of this mitigation will reduce the impacts to below a level of significance.

Non-Native Grassland (Tier III)

Approximately 0.24 acres of this habitat onsite will be impacted as a result of the proposed project. Mitigation for this impact will be at a 0.5:1 ratio through the offsite conservation of 0.12 acres of Tier III habitat or of a greater value within a BRCA. The implementation of this mitigation will reduce the impacts to below a level of significance.

With implementation of the proposed mitigation measures, impacts to biological resources will be mitigated to below a level of significance.

References

ACOE. Army Corps of Engineers 1988. National List of Plant Species that Occur in Wetlands: California.

AOU. American Ornithological Union. 1998, 2000. Forty-second Supplement to the American Ornithologists' Union Checklist of North American Birds.

Atwood, J. L. 1991. Subspecies limits and geographic patterns of morphological variation in California Gnatcatchers (*Poliophtila californica*). Bull. S. Calif. Acad. Sci. 90: 118-133.

Bowman, R. H. 1973. Soil Survey, San Diego Area, California, Part 1. United States Department of Agriculture. 104 pp. + appendices.

CDFG. California Department of Fish and Game. 1999. List of CDFG Special Status Plants, Animals and Natural Communities of San Diego County, California Natural Diversity Data Base, CDFG Natural Heritage Division, Sacramento.

-- California Department of Fish and Game. 1999. "Endangered, Threatened and Rare Plants of California." State of California Dept. of Fish and Game, Natural Heritage Division, Plant Conservation Program, Sacramento. April 1999.

-- California Department of Fish and Game. 2000. CDFG Natural Diversity Data Base. Special Animals. July 2000.

-- California Department of Fish and Game. 2001. "State and Federal Endangered, Rare, and Threatened Animals of California." State of California Resources Agency, Sacramento. October 2001.

County of San Diego 2006. County of San Diego Guidelines for Determining Significance and Report Format Requirements, Biological Resources. Land Use and Environment Group, September 26, 2006.

County of San Diego. Biological Mitigation Ordinance, Ordinance No. 8845.

County of San Diego. Resource Protection Ordinance, Ordinance No. 7968.

Environmental Laboratory. 1987. "Corps of Engineers Wetland Delineation Manual", Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss.

Hickman, J. C. 1993. The Jepson Manual of Higher Plants of California. University of California Press, Berkeley.

- Holland, R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Non-game Heritage Program, State of California Department of Fish and Game, Sacramento, CA. 157 pp.
- Jennings, M. R. 1983. An Annotated Checklist of the Amphibians and Reptiles of Southern California. California Department of Fish and Game 69(3):151-171.
- Jones, J.K., *ET AL.* 1992. Revised Checklist of North American Mammals North of Mexico, 1991. Occasional Papers The Museum Texas Tech. University. Number 146. February 7, 1992.
- Oberbauer, T. 1996. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. San Diego Association of Governments, San Diego, CA 6 pp.
- Powell, J.A., C.L. Hogue. 1979. California Insects. University of California Press, Berkeley.
- Stebbins, R. C. 2003. Field Guide to Western Reptiles and Amphibians Houghton Mifflin Co., Boston.
- Unitt, P. A. 1984. Birds of San Diego County. Memoir 13, San Diego Society of Natural History. 276 pp.
- USGS. U.S. Geological Survey. 2004. Bat Inventory of the San Diego County MSCP Area. <http://www.sdcounty.ca.gov/dplu/> [go to MSCP Portal].
- USFWS. U.S. Fish and Wildlife Service. 2001. U.S. Endangered, Threatened and Candidate Plant and Animal Species by State and Lead Region. U.S. Department of the Interior. United States Fish and Wildlife Service Threatened and Endangered Species System, 12/2001.
- USFWS. U.S. Fish and Wildlife Service. 2002. Survey Protocol Information for the Quino Checkerspot Butterfly (*Euphydryas editha quino*). USFWS 6010 Hidden Valley Road, Carlsbad, CA 92009.
- Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White. 1990. California's Wildlife, Volume III, Mammals. State of California Department of Fish and Game, Sacramento. 407 pp.

Preparer and Persons/Organizations Contacted

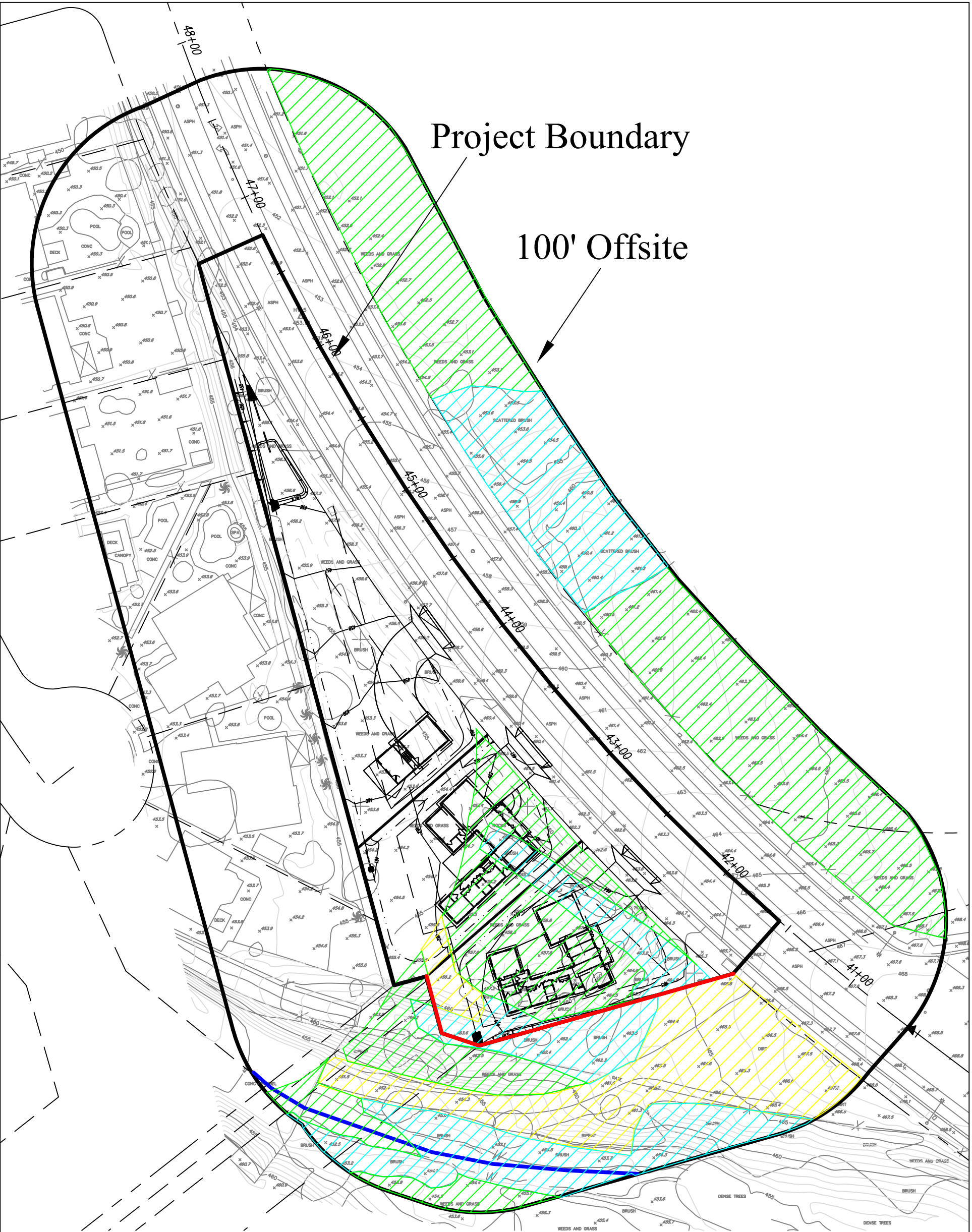
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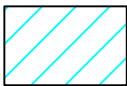
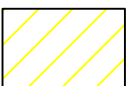

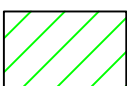


Robin Church, County Approved Consultant

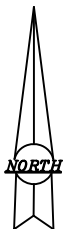


Andrew Drummond, Associate Biologist

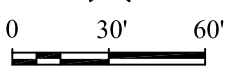


Legend:

	Coastal Sage Scrub - 0.10 acres (Habitat Code: 32510)		Disturbed - 0.02 acres (Habitat Code: 11300)		6' Fire Wall
	Non-Native Grassland - 0.24 acres (Habitat Code: 42200)		Developed - 1.03 acres (Habitat Code: 12000)		Los Coches Creek (Offsite)



NORTH



0 30' 60'

APPENDIX D

SENSITIVE WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR

APPENDIX D

SENSITIVE ANIMAL SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE ANTONIO TPM 21030

Common Name	Scientific name	Federal/ State Status	Habitat	Potential On-Site
INSECTS				
Hermes copper	<i>Lycaena hermes</i>	SOC/CSC	Coastal sage scrub, mixed chaparral and chamise chaparral; 0-3000ft. Host plant <i>Rhamnus crocea</i> , in proximity to <i>Eriogonum fasciculatum</i> .	Low, host plant not observed onsite.
Quino Checkerspot	<i>Euphydryas editha quino</i>	FE/SOC	Open shrub habitats, primary host plant is <i>Plantago erecta</i> .	Low, habitat onsite not appropriate.
AMPHIBIANS				
Western spadefoot toad	<i>Scaphiopus hammondi</i>	SOC/CSC	Grassland situations can occasionally occur in valley-foothill hardwood woodlands. Populations may persist a few years in orchard-vineyard habitats; 0-3000ft.	Low, habitat onsite not appropriate.
REPTILES				
Coastal rosy boa	<i>Charina trivirgata roseofusca</i>	SOC/CSC	Coastal sage scrub, mixed chaparral, oak woodlands and chamise chaparral. Often found in association with rock outcrops; 0-6800 ft.	Low, habitat onsite not appropriate.
Coast patch-nosed snake	<i>Salvadora hexalepis virgulata</i>	SOC/CSC	Grass, chaparral, woodland, desert and coastal sage scrub. Found near rock outcrops with adjacent seasonal drainages; 0-3000ft.	Low, habitat onsite not appropriate.
Coronado skink	<i>Eumeces skiltonianus interparietalis</i>	SOC/CSC	Coastal sage scrub, grassland, riparian, near vernal pools, oak woodlands, chamise chaparral, mixed conifer, closed cone forests, and freshwater marshes. Found during the winter after rainfalls or during spring; 0-3000ft.	Low, habitat onsite not appropriate.
Northern red diamond rattlesnake	<i>Crotalus ruber ruber</i>	SOC/CSC	Coastal sage scrub, mixed chaparral, open grassy areas and agricultural areas, chamise chaparral, pinon juniper and desert scrub; 0-3000ft.	Low, habitat onsite not appropriate.
Orange-throated whiptail	<i>Cnemidophorus hyperythrus</i>	SOC/CSC Protected	Can be found in coastal sage scrub, mixed chaparral, grassland, riparian, and chamise chaparral habitats. Open hillsides with brush and rock, well drained soils; 0-1000ft.	Low, habitat onsite not appropriate.
San Diego banded gecko	<i>Coleonyx variegatus abbotti</i>	SOC/--	This species is uncommon in coastal scrub and chaparral mostly occurring in granite or rocky out crops in this habitat (Zeiner <i>et. al.</i> 1988).	Low, habitat onsite not appropriate.
San Diego horned lizard	<i>Phrynosoma coronatum blainvillei</i>	SOC/CSC	Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grass habitats; needs open areas for basking, ants and other insect prey. 0-8000ft.	Low, habitat onsite not appropriate.

APPENDIX D
SENSITIVE ANIMAL SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE ANTONIO TPM 21030

Common Name	Scientific name	Federal/ State Status	Habitat	Potential On-Site
San Diego ringneck snake	<i>Diadophis punctatus similis</i>	County Sensitive	Coastal sage scrub, mixed chaparral, riparian, oak woodlands, chamise chaparral, mixed conifer, closed cone forest in moist micro-habitats. Can be found on surface during winter after rainfalls or during spring; 0 -7200 ft.	Low, habitat onsite not appropriate.
Silvery legless lizard	<i>Anniella pulchra pulchra</i>	SOC/CSC	Coastal sage scrub, grassland, riparian and coastal desert dunes. Found in sandy loam and areas of accumulated leaf litter beneath shrubs and trees in moist micro-habitats; 0 to 5000 ft.	Low, habitat onsite not appropriate.
MAMMALS				
American badger	<i>Taxidea taxus</i>	--/CSC	This species is most abundant in drier open stages of most shrub, forest, and herbaceous habitats; 0 to over 3000ft.	Low, habitat onsite not appropriate.
Big free-tailed bat	<i>Nyctinomops macrotis</i>	--/CSC	This species is found in a variety of plant associations including desert scrub, various woodlands and coniferous forests. Is a colonial roosting species that is typically found in crevices of rugged cliffs and high, rocky outcrops; 0 to 3000ft.	Low, habitat onsite not appropriate.
Dulzura California pocket mouse	<i>Chaetodipus californicus femoralis</i>	SOC/CSC	Occupies coastal sage scrub, mixed chaparral, oak woodland, chamise chaparral, and mixed conifer habitats; 0 to over 3000ft.	Low, habitat onsite not appropriate.
Greater western mastiff bat	<i>Eumops perotis californicus</i>	SOC/CSC	Open semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. Crevices in cliff faces, high buildings, trees, and tunnels are required for roosting; 500-3000ft.	Low, habitat onsite not appropriate.
Mexican long-tongued bat	<i>Choeronycteris mexicana</i>	SOC/CSC	This bat occurs in a variety of habitats, including scrub, desert, semidesert grassland, oak woodland and tropical deciduous forests. Mexican long-tongued bats roost predominantly in caves, mines, rock crevices, and abandoned buildings. C. mexicana forages primarily on nectar and pollen of night blooming flowers such as agaves and cacti.	Low, habitat onsite not appropriate.
Mountain Lion	<i>Felis concolor</i>	County Sensitive	Species found in a variety of different habitats from desert to coast range forest; 0 to 10,000ft.	Low, habitat onsite not appropriate.
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	SOC/CSC	Nocturnal. Found in coastal sage scrub and mixed and chamise chaparral. Seeks cover in rocky/gravelly areas with a yucca overstory; 500-3000ft	Low, habitat onsite not appropriate.

APPENDIX D

SENSITIVE ANIMAL SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE ANTONIO TPM 21030

Common Name	Scientific name	Federal/ State Status	Habitat	Potential On-Site
Pallid bat	<i>Antrozous pallidus</i>	--/CSC	Coastal sage scrub, mixed chaparral, oak woodlands, chamise chaparral, desert wash and desert scrub. Prefers snags (especially oak), rocky outcrops, cliffs and crevices with access to open habitats for foraging; 0-6000ft.	Low, habitat onsite not appropriate.
Pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	--/CSC	This species is found in a variety of plant associations including desert scrub, coastal scrub and pine oak woodlands. Is a colonial roosting species that is typically found in crevices of rugged cliffs and high, rocky outcrops; 0 to 3000ft.	Low, habitat onsite not appropriate.
San Diego black-tailed jackrabbit	<i>Lepus californicus bennetti</i>	SOC/CSC	Coastal sage scrub, mixed chaparral, oak woodlands, chamise chaparral, mixed conifer, and closed cone forest and open areas. Common in irrigated pastures and row crops; 0 to over 3000ft.	Low, habitat onsite not appropriate.
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	SOC/CSC	Nocturnal in coastal sage scrub, desert, oak woodlands, chamise chaparral and rocks in moderate to dense vegetation. Most abundant in rocky areas -- prefers rock outcrops and crevices for nest sites, but also builds nests in low branches of trees. 500-3000ft.	Low, habitat onsite not appropriate.
Southern grasshopper mouse	<i>Onychomys torridus ramona</i>	SOC/CSC	Nocturnal in coastal sage scrub, mixed chaparral, grassland, and chamise chaparral. Low to moderate shrub cover is preferred; 500-3000ft.	Low, habitat onsite not appropriate.
Southern mule deer	<i>Odocoileus hemionus fuliginata</i>	County Sensitive	The mule deer is extremely adaptable occupying all but two or three of the major vegetation types in the western United States.	Low, habitat onsite not appropriate.
Yuma myotis	<i>Myotis yumanensis</i>	SOC/CSC	Mixed chaparral, riparian, oak woodland and pinon juniper. Optimal habitats are open forests and woodlands with sources of water over which to feed; roosts in buildings, mines, caves, bridges, crevices, and abandoned swallow nests. Sea level to 11,000 feet, but uncommon above 8000 feet.	Low, habitat onsite not appropriate.
BIRDS				
Bell's sage sparrow	<i>Amphispiza belli belli</i>	SOC/CSC	Coastal sage scrub, mixed and chamise chaparral. Nests well hidden in sagebrush or other scrub; 0-3000ft.	Low, habitat onsite not appropriate.
Burrowing owl	<i>Athene cunicularia hypugea</i>	SOC/CSC	Open, dry grasslands agricultural and range lands, and desert habitats of low growing vegetation (associated with burrowing animals); 0-1000ft.	Low, habitat onsite not appropriate.
California gnatcatcher	<i>Poliophtila californica californica</i>	FT/CSC	Most numerous in low, dense coastal sage scrub habitat of coastal hills.	Low, habitat onsite not appropriate.

APPENDIX D

SENSITIVE ANIMAL SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE ANTONIO TPM 21030

Common Name	Scientific name	Federal/ State Status	Habitat	Potential On-Site
Cooper's Hawk	<i>Accipiter cooperi</i>	--/CSC (nesting)	Uncommon migrant and winter visitor, rare summer resident, during migration and winter found throughout SD County. Found in oak woodlands or edges of woods, nests in tall trees.	Low, habitat onsite not appropriate.
Golden eagle	<i>Aquila chrysaetos canadensis</i>	--/CSC Fully protected	Mountains, foothills, and adjacent grassland, open areas and canyons; 0-11,500 ft. (nesting/wintering)	Low, habitat onsite not appropriate.
Northern harrier	<i>Circus cyaneus hudsonius</i>	--/CSC	Grasslands and salt, alkali and freshwater marshes; 0-1000ft. Nests on ground in shrubby vegetation, usually emergent wetlands or along rivers or lakes. May also nest in grasslands, grain fields, or on sagebrush flats several miles from water.	Low, habitat onsite not appropriate.
Rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	SOC/CSC	Favors steep and rocky coastal sage scrub. Also seeks scattered grass in sage scrub and colonizes grass that grows as a successional stage following brush fires (Unitt 1984).	Low, habitat onsite not appropriate.
Sharp-shinned hawk (nesting)	<i>Accipiter striatus</i>	--/CSC	Open woodlands, residential, larger trees for nesting. Uncommon migrant and winter visitor, casual summer visitor; nesting has not been documented in San Diego County (Unitt 1984).	Low, habitat onsite not appropriate.
Turkey vulture	<i>Cathartes aura</i>	County Sensitive	Spring and fall migrant, uncommon to locally common winter visitor and rare to uncommon summer resident of San Diego County (Unitt 1984)	Low, habitat onsite not appropriate.

* = Appendix E – Sensitivity Codes

APPENDIX C

**SENSITIVE PLANT SPECIES
WITH THE POTENTIAL TO OCCUR**

APPENDIX C
SENSITIVE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO
ANTONIO TPM 21030 (USGS EL CAJON QUAD)

Species	Growth form/Bloom Period	CNPS	R-E-D	State	Federal	Potential to Occur Onsite
<i>ACANTHOMINTHA ILICIFOLIA</i> "San Diego thorn-mint"	Annual herb April - June	1B	2-3-2	CE	FT	Low, due to lack of appropriate soils and habitat onsite.
<i>ACHNATHERUM DIEGOENSE</i> "San Diego County needle grass"	Perennial herb February - June	4	1-2-1	None	None	Low, would have been observed during site visit.
<i>AMBROSIA PUMILA</i> "San Diego ambrosia"	Perennial herb May - September	1B	3-3-2	None	SOC	Low, no appropriate habitat onsite.
<i>ARTEMISIA PALMERI</i> "San Diego sagewort"	Shrub (deciduous) May - September	4	1-2-1	None	None	Low, would have been observed during site visit
<i>CAULANTHUS STENOCARPUS</i> "slender pod jewelflower"	Annual herb March June			None	Rare	Low, site is highly disturbed/developed.
<i>CHORIZANTHE PROCUMBENS</i> "prostrate spineflower"	Annual herb			None	None	Low, site is highly disturbed/developed.
<i>DICHONDRA OCCIDENTALIS</i> "western dichondra"	Perennial herb (rhizomatous) March - July	4	1-2-1	None	None	Low, site is highly disturbed/developed.
<i>DUDLEYA VARIEGATA</i> "variegated dudleya"	Perennial herb May - June	1B	2-2-2	None	SOC	Low, site is highly disturbed/developed.
<i>DUDLEYA VISCIDA</i> "sticky dudleya"	Perennial herb May - June	1B	2-2-3	None	SOC	Low, site is highly disturbed/developed.
<i>GITHOPSIS DIFFUSA</i> SSP. <i>FILICAULIS</i> "Mission Canyon bluecup"	Annual herb April - June	3	?-3-3	None	SOC	Low, site is highly disturbed/developed.
<i>MUILLA CLEVELANDII</i> "San Diego goldenstar"	Perennial herb (bulbiferous) May	1B	2-3-2	None	SOC	Low, site is highly disturbed/developed.
<i>SELAGINELLA EREMOPHILA</i> "desert spike-moss"	Perennial herb (rhizomatous)	2	3-2-1	None	None	Low, site is highly disturbed/developed.
<i>VIGUIERA LACINIATA</i> "San Diego County viguiera"	Shrub February - June	4	1-2-1	None	None	Low, would have been observed during site visit

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APPENDIX B

WILDLIFE SPECIES OBSERVED

APPENDIX B

WILDLIFE SPECIES OBSERVED ON THE ANTONIO PROPERTY - TPM 21030

Common Name	Scientific Name	Habitat Observed *	# Observed (estimate)
Birds			
Anna's hummingbird	<i>Calypte anna</i>	DEV	1
Bushtit	<i>Psaltiriparus minimus</i>	DEV	2
Mourning dove	<i>Zenaida macroura</i>	DEV	3
Scrub jay	<i>Aphelocoma californica</i>	DEV	1
Mammals			
Desert cottontail rabbit	<i>Sylvilagus audubonii</i>	CSS	2
*DEV = Developed, CSS = Coastal Sage Scrub			

APPENDIX A

PLANTS SPECIES OBSERVED

APPENDIX A
PLANT SPECIES OBSERVED ON THE ANTONIO PROPERTY TPM 21030

Family Name	Species Name	Common Name	Habitat
	ANGIOSPERMS: DICOTS		
Asteraceae	<i>Baccharis salicifolia</i>	Mule-fat, Seep-willow	CSS
Asteraceae	<i>Baccharis sarothroides</i>	Broom Baccharis	CSS
Asteraceae	* <i>Centaurea</i> sp.	Thistle	NNG
Brassicaceae	* <i>Brassica nigra</i>	Black Mustard	NNG
Fabaceae	<i>Lotus scoparius</i> var. <i>brevialatus</i>	Deerweed	CSS
Lamiaceae	* <i>Marrubium vulgare</i>	Horehound	CSS, NNG
Lamiaceae	<i>Salvia apiana</i>	White Sage	CSS
Polygonaceae	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	California Buckwheat	CSS
Solanaceae	* <i>Nicotiana glauca</i>	Tree Tobacco	CSS
Urticaceae	<i>Urtica dioica</i> ssp. <i>holosericea</i>	Hoary Nettle	CSS
	ANGIOSPERMS: MONOCOTS		
Poaceae	* <i>Bromus madritensis</i> ssp. <i>rubens</i>	Foxtail Chess	NNG
Poaceae	* <i>Cortaderia selloana</i>	Selloa Pampas Grass	CSS
Poaceae	* <i>Pennisetum setaceum</i>	African Fountain Grass	CSS
* = Non-native Plant Species, CSS = Coastal Sage Scrub, NNG = Non-Native Grassland			

APPENDIX E

SENSITIVITY CODES

SENSITIVITY CODES

FEDERAL SPECIES DESIGNATIONS (USFWS 2001)

Category

FE	Federal Endangered species
FT	Federal Threatened species
FPE	Taxa proposed to be listed as Endangered.
FPT	Taxa proposed to be listed as Threatened.
SOC	Species of Concern (former Candidate Species)

STATE SPECIES DESIGNATIONS (CDFG 2000)

Category

SE	State listed as Endangered.
ST	State listed as Threatened.
SR	State-listed Rare
SCE	State candidate for listing as Endangered.
SCT	State candidate for listing as Threatened.
CSC	CDFG "Species of Special Concern".

CALIFORNIA NATIVE PLANT SOCIETY DESIGNATIONS (CNPS 2003)

The CNPS Lists

- List 1 Plants of highest priority.
 - 1A Plants presumed extinct in California.
 - 1B Plants rare, threatened or endangered in California and elsewhere.
- List 2 Plants rare, threatened or endangered in California, but more common elsewhere.
- List 3 Plants about which we need more information. (A Review List)
- List 4 Plants of limited distribution (A Watch List).

The R-E-D Code

R (Rarity)

- 1 Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time.
- 2 Distributed in a limited number of occurrences, occasionally more if each occurrence is small.
- 3 Distributed in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported.

E (Endangerment)

- 1 Not endangered.
- 2 Endangered in a portion of its range.
- 3 Endangered throughout its range.

D (Distribution)

- 1 More or less widespread outside California.
- 2 Rare outside California.
- 3 Endemic to California.